

Atty. Dkt. No. 02CR146/KE (047141-0294)

### **REMARKS**

Applicants respectfully request reconsideration of the present Application in view of the foregoing amendments and in view of the reasons that follow. Claims 1-3, and 7-22 have been rejected by the Examiner. No claims have been amended. Accordingly, Claims 1-3 and 7-22 are pending in the present Application upon entry of this Reply and Amendment.

A detailed listing of all claims that are, or were, in the Application, irrespective of whether the claim(s) remain under examination in the Application, is presented, with an appropriate defined status identifier.

For simplicity and clarity purposes in responding to the Office Action, Applicants' remarks are primarily focused on the rejections of the independent claims (i.e., Claims 1, 8, and 16) outlined in the Office Action, with the understanding that the dependent claims that depend from the independent claims are patentable for at least the same reasons (and in most cases other reasons) that the independent claims are patentable. Applicants expressly reserve the right to argue the patentability of the dependent claims separately in any future proceedings.

#### ***Independent Claims 1, 8, and 16***

On pages 2-7 of the Office Action, Claims 1-3 and 7-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Appl. No. 2003/0198206 to Cain et. al. ("Cain"); in view of U.S. Patent Appl. No. 2004/0203820 to Billhartz ("Billhartz"); and further in view of U.S. Patent Appl. No. 2002/0049039 to Natarajan ("Natarajan"). Applicants respectfully submit that the rejections should be withdrawn, because the cited references fail to disclose, teach, or suggest the subject matter of Claims 1-3 and 7-22.

The Office Action stated:

[T]he data cells including the congestion (interference/packet error rate) metric information (see Pars. [0028, 0042 and 0077]).

Claim 1 is in independent form and recites "the data cells including routing information and the congestion metric information." In Claim 1, the data cells transmit routing information

Atty. Dkt. No. 02CR146/KE (047141-0294)

and the congestion metric information at the same time, which is apparent by the language “the data cells including routing information and congestion metric information.” The congestion metric information is piggybacked onto the routing information. In this way, the congestion metric information can advantageously use the resources dedicated to the routing updates to deliver the congestion metric information.

Cain discloses “an interference detection unit 18d is included to detect interference in time slots for communication with neighboring mobile nodes.” (Cain, para. [0029]). Cain does not disclose “the data cells including routing information and the congestion metric information.” Cain does not disclose routing information and the congestion metric information at the same time.

Billhartz discloses “a traffic information generator 76 generates traffic information based upon how much traffic is being communicated between various nodes in the network.” (Billhartz, para. [0073]). Billhartz does not disclose “the data cells including routing information and the congestion metric information.” Billhartz does not disclose data cells including routing information and the congestion metric information at the same time.

Natarajan discloses “monitoring actual traffic demand conditions and determining a least utilized base station for servicing a channel request by a subscriber unit.” (Natarajan, para. [0008]). Natarajan does not disclose “the data cells including routing information and the congestion metric information.” Natarajan does not disclose routing information and the congestion metric information at the same time.

Further, Claim 1 recites “wherein the congestion metric information is based on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity.”

The Examiner stated:

The combination of Cain fails to teach ‘congestion metric information is base on comparing cell counts against a total capacity of each link’.

Atty. Dkt. No. 02CR146/KE (047141-0294)

Furthermore, Billhartz mentions a traffic matrix, which indicates how much traffic is being sent from a node, and buffering of such information in a traffic information buffer (see Pars. 69-70 and 0072-73).

The Applicants respectfully disagree with the Examiner that “a traffic matrix, which indicates how much traffic is being sent from a node, and buffering of such information in a traffic information buffer” (Billhartz, para. [0073]) is the same as “the congestion metric information is based on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity,” which is recited in Claim 1.

Applicants respectfully request withdrawal of the rejection of Claim 1 since Cain in combination with Billhartz and/or Natarajan does not disclose, teach, or suggest “a communications system” with a “transceiver nodes configured to communicate data cells, the data cells being transmitted from a transmission queue, the data cells including routing information and the congestion metric information” and “wherein the congestion metric information is based on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity,” as required by Claim 1.

Claims 2-3, and 7 depend from Claim 1 and are allowable therewith, for at least the reasons set forth above, without regard to the further patentable limitations set forth in such claims. Reconsideration and withdrawal of the rejections of Claims 1-3 and 7 is respectfully requested.

Claims 8 and 16 are in independent form and recite “combining the congestion metric information with routing information.” In Claims 8 and 16, the data cells transmit routing information and the congestion metric information at the same time, which is apparent by the language “combining the congestion metric information with routing information.” The congestion metric information can advantageously use the resources dedicated to the routing updates to deliver the congestion metric information.

Atty. Dkt. No. 02CR146/KE (047141-0294)

Cain discloses “an interference detection unit 18d is included to detect interference in time slots for communication with neighboring mobile nodes.” (Cain, para. [0029]). Cain does not disclose “combining the congestion metric information with routing information.”

Billhartz discloses “a traffic information generator 76 generates traffic information based upon how much traffic is being communicated between various nodes in the network.” (Billhartz, para. [0073]). Billhartz does not disclose “combining the congestion metric information with routing information.”

Natarajan discloses “monitoring actual traffic demand conditions and determining a least utilized base station for servicing a channel request by a subscriber unit.” (Natarajan, para. [0008]). Natarajan does not disclose “combining the congestion metric information with routing information.”

Further, Claims 8 and 16 recite “wherein the congestion metric information is based on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity.”

The Examiner stated:

The combination of Cain fails to teach ‘congestion metric information is base on comparing cell counts against a total capacity of each link’.

Furthermore, Billhartz mentions a traffic matrix, which indicates how much traffic is being sent from a node, and buffering of such information in a traffic information buffer (see Pars. 69-70 and 0072-73).

The Applicants respectfully disagree with the Examiner that “a traffic matrix, which indicates how much traffic is being sent from a node, and buffering of such information in a traffic information buffer” (Billhartz, para. [0073]) is the same as “the congestion metric information is based on comparing cell counts against a total capacity of each link, a monitoring

Atty. Dkt. No. 02CR146/KE (047141-0294)

signal of a processor buffer availability, and a monitoring signal of priority queues capacity,” which is recited in Claims 8 and 16.

Applicants respectfully request withdrawal of the rejection of Claims 8 and 16 since Cain in combination with Billhartz and/or Natarajan does not disclose, teach, or suggest “combining the congestion metric information with routing information” and “wherein the congestion metric information is based on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity,” as required by Claims 8 and 16.

Claims 9-15 and 17-22 depend variously from Claims 8 and 16 and are allowable therewith, for at least the reasons set forth above, without regard to the further patentable limitations set forth in such claims. Reconsideration and withdrawal of the rejections of Claims 8-22 is respectfully requested.

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Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Applicants respectfully put the Patent Office and all others on notice that all arguments, representations, and/or amendments contained herein are only applicable to the present patent Application and should not be considered when evaluating any other patent or patent application including any patents or patent applications which claim priority to this patent Application and/or any patents or patent applications to which priority is claimed by this patent Application.

Atty. Dkt. No. 02CR146/KE (047141-0294)

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

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